UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,018	06/07/2005	Dietmar Schwarzenthal	028987.55976US	8791
23911 7590 02/27/2007 CROWELL & MORING LLP			EXAMINER	
INTELLECTUA	AL PROPERTY GROUP	•	RIDDLE, KYLE M	
P.O. BOX 14300 WASHINGTON, DC 20044-4300			ART UNIT	PAPER NUMBER
	•		3748	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THS	02/27/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/538,018	SCHWARZENTHAL, DIETMAR				
Office Action Summary	Examiner	Art Unit				
	Kyle M. Riddle	3748				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIO 36(a). In no event, however, may a r will apply and will expire SIX (6) MON e, cause the application to become AB	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status	•					
1) ☐ Responsive to communication(s) filed on 2a) ☐ This action is FINAL. 2b) ☑ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Expression in the practice of the condition of the practice of the communication is accordance.	s action is non-final. nce except for formal matt	•				
Disposition of Claims						
 4) Claim(s) 4-11 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 4-11 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or 	wn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 07 June 2005 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Example 11.) accepted or b) ⊠ obje drawing(s) be held in abeyar tion is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/7/05. 	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application				

Application/Control Number: 10/538,018

Art Unit: 3748

DETAILED ACTION

Drawings

1. The drawings are objected to because "ntake 1" should read --Intake 1-- as part of the fourth intake valve stroke in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Application/Control Number: 10/538,018 Page 3

Art Unit: 3748

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Specifically, the abstract is too long.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 4-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Phoenix et al. (U.S. Patent 5,361,736).

Phoenix et al. disclose a variable valve timing device comprising:

- a six cylinder overhead camshaft engine (column 2, lines 29-31);
- a valve operating means to advance or retard valve opening/closings (column 1 lines 60-68);
- a cam 6 contacting a valve tappet for opening and closing intake and exhaust valves and vary the phase of the camshaft with respect to the crankshaft (column 2, lines 30-38, lines 50-60);
- adjusting the camshaft toward late and toward early during an immediately subsequent a valve stroke operation to decrease a valve opening time;
- adjusting the camshaft toward early and toward late during an immediately subsequent valve stroke operation to increase valve opening time (column 3, lines 40-65, column 4, lines 63-65; Figure 10).

Conclusion

5. The IDS (PTO-1449) filed on 7 June 2005 has been considered. An initialized copy is attached hereto.

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of 2 patents.
- Shiraishi et al. (U.S. Patent 6,055,948) disclose a engine control system with the provision for early or late adjustment of the valve opening with varying lifts.
- Fujieda et al. (U.S. Patent 6,453,871) disclose a engine controlling apparatus with multiple valve opening and closing and varying the valve lift.

Communication

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle M. Riddle whose telephone number is (571) 272-4864. The examiner can normally be reached on M-F (07:30-5:00) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyle M. Riddle Examiner

Art Unit 3748

kmr

THOMAS DENION SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3700